



**PURCHASING ITEM
FOR
COUNCIL AGENDA
Memo No. CA13-096**

1. Agenda Item Number:

71

2. Council Meeting Date:
December 13, 2012

TO: MAYOR & COUNCIL

3. Date Prepared: November 30, 2012

THROUGH: CITY MANAGER

4. Requesting Department: Municipal Utilities

5. SUBJECT: Change Order No. 2 Ocotillo Water Transmission Main and Wastewater Forcemain.

6. RECOMMENDATION: Staff recommends Council approve Change Order No. 2 to the Construction Manager at Risk contract with Achen-Gardner Construction, LLC for Phase II of the Ocotillo Water Transmission Main and Wastewater Forcemain, Project No. WW1105-402, in the amount of \$587,300.48 for a revised contract price of \$13,786,565.85.

7. BACKGROUND/DISCUSSION: On May 24, 2012 Council approved a Construction Manager at Risk contract with Achen-Gardner Construction, LLC to construct the Ocotillo Water Transmission Main and Wastewater Forcemain. Work under this project includes a new 36" forcemain to transfer wastewater flows from the Ocotillo Water Reclamation Facility to the Airport Water Reclamation Facility for treatment, and a new 24" water transmission main to serve future system demands in southwest Chandler.

The related expansion of the Airport Water Reclamation Facility (AWRF) necessitates a dedicated power feed, connecting the AWRF facility to SRP's Pace Substation, located adjacent to the Consolidated Canal, south of Ocotillo Road. McCarthy Building Co. included an allowance in their existing GMP to accommodate this work. Achen Gardner, as part of their current contract will be installing the 36" forcemain adjacent to the canal from Ocotillo Road to the AWRF. In an effort to reduce costs and take advantage of the forcemain construction adjacent to the Consolidated Canal, staff solicited a proposal from Achen-Gardner to install the required electrical conduit. Achen-Gardner's costs were lower than the cost McCarthy had included in the AWRF Expansion project. Staff believes the best approach is to shift the trench and conduit installation to Achen-Gardner's scope of work for the Ocotillo Water Transmission Main and Wastewater Forcemain contract. A cost savings of approximately \$90,000 will be realized by having Achen-Gardner perform the installation.

Also, included in this change order is the removal and replacement of an existing 16" asbestos cement (AC) waterline in Ocotillo Road. The portion to be replaced is between the railroad tracks and the canal on Ocotillo Road that lays parrallel and is in possible conflict with the new 24" transmission main currently under construction. The City recently encountered significant maintenance issues with AC pipe material as it ages, including two recent waterline breaks on Chandler Boulevard. This portion of the work will be funded by the City. This water main installation will shorten the future street project schedule.

8. EVALUATION: The selection process was followed in accordance with State law for design services. Twelve Statements of Qualifications were received from qualified firms on November 4, 2011. The Selection Committee included the following members:

Bob Fortier, Construction Project Manager
Joshua Plumb, P.E., Engineering Project Manager
Kim Neill, Utilities Operations Manager
Alvin Robertson, Wastewater Collection Superintendent
Terry Cole, Chandler Resident/Contractor
John Rydzewski, Intel Corporation

Achen-Gardner Construction, LLC was selected based on qualifications, construction capability, current workload, and experience.

9. FINANCIAL IMPLICATIONS:

Cost: \$587,300.48
Savings: \$90,000.00

Fund Source:

<u>Account No.:</u>	<u>Fund Name:</u>	<u>Program Name:</u>	<u>CIP Funded:</u>	<u>Amount:</u>
615.3910.6810.6WW022	Wastewater Operating	Water Reclamation Facility Expansion	Yes	\$189,791.06
601.3820.6712.6WA110	Water Bond	Water System Upgrades w/Street Projects	Yes	\$397,509.42


10. PROPOSED MOTION: Move Council approve Change Order No. 2 to the Construction Manager at Risk contract with Achen-Gardner Construction, LLC for Phase II of the Ocotillo Water Transmission Main and Wastewater Forcemain, Project No. WW1105-402, in the amount of \$587,300.48 for a revised contract price of \$13,786,565.85, and authorize the Mayor to sign the contract documents.

ATTACHMENTS: Change Order, Map

APPROVALS**11. Requesting Department**


John Knudson, Utilities Engineering Manager

12. Department Head


Dave Siegel, Municipal Utilities Director

13. Transportation & Development


Bob Fortier, Capital Projects Manager


Sheina Hughes, City Engineer

14. City Manager


Rich Dlugas

CITY OF CHANDLER
CHANGE ORDER NUMBER 2
DATE _____

This Change Order is not valid until signed by both the City and the Contractor. Signature of the Contractor indicates agreement herewith, including any adjustments in the Contract Price or Contract Time.

	South Chandler Force Main Ocotillo Water Reclamation Facility to Airport Water Reclamation Facility and Water Transmission Main	CONTRACTOR	Achen-Gardner Construction
PROJECT NAME		COST ACCT #	415.3310.5922.0000.6ST607.0000
PROJECT NO.	WW1105-402	NTP DATE	06/01/12
USER DEPT	Municipal Utilities		

TO: Achen-Gardner Construction

(CONTRACTOR)

YOU ARE DIRECTED TO MAKE THE FOLLOWING CHANGES TO THIS CONTRACT:
 (Describe changes in detail and/or reference attached cost breakdown sheet.)

CM@Risk shall provide all equipment, labor, material, supervision and incidentals as required to construct an SRP ductbank (Ocotillo Rd. to AWRP); and remove and replace approximately 2,100 lineal feet of 16" AC waterline pipe. Fee Schedule Exhibit A and Scope of Work Exhibit B, attached hereto and incorporated herein by reference.

ORIGINAL CONTRACT AMOUNT:	\$13,067,196.88
CURRENT CONTRACT PRICE PRIOR TO CHANGE ORDER:	\$13,199,265.37
(Including previous change orders)	
NET CHANGE RESULTING FROM THIS CHANGE ORDER:	\$587,300.48
REVISED CONTRACT PRICE INCLUDING THIS CHANGE ORDER:	\$13,786,565.85
CHANGE ORDER IS % OF ORIGINAL CONTRACT AMOUNT:	4.50%

CONTRACT TIME OR COMPLETION DATE PRIOR TO THIS
 CHANGE ORDER (Including previous change orders):

	4/1/13
DAYS	DATE

NET CHANGE RESULTING FROM THIS CHANGE ORDER:

0	
DAYS	

REVISED CONTRACT TIME AND COMPLETION DATE:

0	4/1/13
DAYS	DATE

THE ABOVE IS AGREED TO BY:

Achen-Gardner Construction
 CONTRACTOR

By:

Daniel J. Spitz / Vice President

Date

CITY OF CHANDLER (Date & Name of Owner Dept. verbal approval): _____

For Change Orders of less than \$50,000 and 10% of contract price:

Title: _____
 Department Director or Designee
 Or (but not both)

Signature

By:

Date

For Change Orders of \$50,000 or more, or 10% or more of contract price:

 MAYOR
 Approved by Council on: _____
 Date

Date:

Attest: City Clerk

Date

Approved as to form: _____
 Revised 1-08 City Attorney
 22010 (update 2/25/03)

EXHIBIT B SCOPE OF WORK

REMOVE AND REPLACE AC WATERLINE PIPE

Scope of work is for the removal and replacement of approximately 2100 LF of existing ACP potable waterline on Ocotillo Road. Reinstallation of 16" waterline shall be with PR350, CL50 ductile iron pipe. This work is to be performed concurrently with the installation of the 24" water transmission main pipeline. The new 16" pipeline will be reconnected to the existing water main at the east side of the UPRR tracks and at the west side of the Consolidated Canal. Both waterlines are to be installed in a single common trench. The new 16" waterline will be installed to the 24" water transmission main profile.

SRP DUCTBANK (OCOTILLO RD. TO AWRF)

Scope of work is for the installation of approximately 3700 LF of buried electrical duct bank containing 3 ' 3" DB120 conduits and 5 each sweep locations for pull enclosures (to be supplied by SRP.) The buried duct bank will follow an alignment and scope limits as shown on the attached sketch DB-1.

LIST OF DOCUMENTS

- Change Order #2 is based on the following documents
- GMP 1 Construction Agreement dated 4/18/12, GMP 2 Construction Agreement dated 5/31/12 and GMP2 Change Order No. 1 dated 7/27/12
- Ocotillo WRF Water Transmission Main GMP2B plans, Black & Veatch (6/7/12)
- Achen-Gardner sketch DB-1 dated 11/15/12
- SRP Diagrams YE-22-02, YE-15-16, and YE-15-08 as received from Tim Rinn, SRP on 11/8/12

ASSUMPTIONS, CLARIFICATIONS, INCLUSIONS & EXCLUSIONS

- Appropriate disposal of ACP pipe materials is included
- 2' separation (minimum) shall be maintained between the 16" and 24" waterlines
- Bypass piping and temporary connections are excluded
- No concrete or slurry encasement removals are included
- Excludes design engineering
- SWPPP and QC testing are to be performed under existing 24" Transmission Main GMP 2 scope
- Conduit for SRP duct bank to be installed with 48" minimum cover to existing grade
- Conduit for SRP duct bank to be installed with spacers located 6' on center
- Conduit for SRP duct bank to be installed using 1 1/2 sack non-reinforced CLSM red-dyed slurry
- Contractor shall install pull tape in each conduit after completion of the duct bank and pull enclosure installation
- Contractor shall install bare copper tracer wire and warning tape
- SRP duct bank installation does not include installation of electrical conductors or any other electrical devices not identified in SRP plans. No connections to existing electrical systems, cabinets,
- No design has been completed by SRP for the work under this proposal. Assumptions regarding materials, methods and scope are based solely on the list of documents
- Alignment of the duct bank is assumed to be within the existing SRP ROW on the western side of the Consolidated Canal. Construction of the duct bank will require daily closures of the canal access
- SRP duct bank installation excludes survey and materials testing
- Change order work includes traffic control and dust control, as needed
- Excludes relocation or other modifications of existing utilities, except as detailed in this change order

**EXHIBIT A
FEE**

Item #	Item Description	Total Qty	Unit	Unit Cost	Total Cost
REMOVE AND REPLACE AC WATER PIPELINE					
106	Remove and replace 16" waterline using PR3510, CL50 DI pipe material	2,100	LF	134.80	283,080.00
107	16" waterline horizontal realignment	1	EA	1,400.00	1,400.00
109	Tie in 12" waterline at Centre Point	1	EA	14,622.88	14,622.88
111	Pothole/Survey/As-Builts (allowance)	1	LS	12,500.00	12,500.00
113	Pole bracing (allowance)	3	EA	2,000.00	6,000.00
SRP DUCT BANK (OCOTILLO RD. TO AWRE)					
10	Install 3 - 3" conduit duct bank	3,700	LF	29.23	108,151.00
20	Sub up/build pad for pull enclosure	5	EA	514.61	2,573.05
40	Remove/replace asphalt	45	SY	214.78	9,665.10
50	Traffic/pedestrian control	1	LS	9,744.83	9,744.83
60	Brace poles (allowance)	7	EA	2,000.00	14,000.00
70	Restore SRP O&M road	1	LS	7,505.65	7,505.65
	SUBTOTAL - CONSTRUCTION DIRECT COSTS				\$ 469,242.51
1006	CONSTRUCTION CONTINGENCY FOR MATERIAL QUANTITY CHANGES (5%) (5% items 10,20,40,50,60,70,106,107,109,111,113)	5%	%		23,462.13
	Subtotal - Construction Direct Costs Plus Contingency				\$ 492,704.64
1002	Contractor's Fee for Overhead (7.5%) and Profit (2.5%) OR Total Fee of 10%	10%	%		49,270.46
	Subtotal - Fee				\$ 49,270.46
	Running Total #1 - Total w/o Bond Insurance & Tax				\$ 541,975.10
1003	Builder's Risk, General Liability, Auto Insurance, etc. (1.5% of Running Total #1)	1.5%	%		8,129.63
1004	General Contractor's Bond (1% of Running Total #1)(Allowance)	1.0%	%		5,419.75
	Subtotal - Markups				\$ 13,549.38
	Running Total #2 - Total w/o Tax				\$ 555,524.48
1005.a	Sales Tax (COC 65% of 8.8% or 5.72% of Running Total #2) (Allowance)	5.72%	%		31,776.00
1005.b	Tax Credits (Allowance) (Current Estimated Costs - Storm Drain, Irrigation Pipe, Potable, and Reclaimed Water Pipe)	Allow	TBD		-
1005	Subtotal - Taxes				\$ 31,776.00
	Running Total - TOTAL CHANGE ORDER				\$ 587,300.48

Achen-Gardner Sketch DB-1 (11-15-12)

North Boundary
of Duct Bank

Proposed
Duct Bank
Alignment

Consolidated Canal

McQueen Rd.

Ocotillo Rd.

South Boundary
of Duct Bank

Power Pole (Typ)

5'

Access Road

VIEW LOOKING NORTH
ALONG DUCT BANK
ALIGNMENT

Consolidated
Canal

Proposed
Duct Bank

